

# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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January 9, 2004

TO: Internal File

THRU: Dana Dean, P.E., Senior Reclamation Hydrologist, Team Lead

FROM: Peter Hess, Environmental Scientist III, Land

RE: Refuse Pile Redesign and PMLU, Plateau Mining Corporation, Willow Creek Mine, C/007/0038, Task ID#1788

### **SUMMARY:**

Due to the hazards associated with the extraction of the “D” seam and a lack of interest relative to the sale of the property, Plateau Mining Corporation informed the Division on September 3, 2002, of its intent to reclaim the Willow Creek Mine site.

On December 29, 2003, the Permittee submitted an application for a change in the post mining land use with respect to the Castle Gate area. The Castle Gate area is referred to as such, because it is where the town of Castle Gate existed until 1967. In that year, the town was razed, and the American Electric Power Corporation built a preparation plant to wash coal from the Mines located in Hardscrabble and Sowbelly Canyons.

In the year since the Permittee notified the Division that it was initiating the total reclamation of the Willow Creek site, much of the facilities has been demolished. On December 9, 2003, the Permittee, in conjunction with representatives of the Price River Water Improvement District, informed the Division of PRWID’s interest in obtaining land within the Castle Gate area, such that same could be used for the expansion of PRWID’s water treatment facilities. PRWID’s interests would develop the Castle Gate area under the proposed industrial classification, reducing the reclamation responsibility in the area for the Permittee by eliminating much of the backfilling and grading work, and provide an enhanced usage of the land.

TASK ID#1788 is the proposal which would add an industrial classification to the post mining land use determination for the Castle Gate area. Approval will allow PRWID to purchase the land, and expand their water treatment capability. This technical memorandum will address the requirements of the R645 coal rules as they relate to Land Use information for the Pre-Mining as well as the Post Mining conditions.

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**TECHNICAL ANALYSIS:**

**ENVIRONMENTAL RESOURCE INFORMATION**

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

**LAND-USE RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.22; R645-301-411.

**Analysis:**

All information relative to the Castle Gate area is contained in Exhibit 19, Volumes 10 through 14. Chapter 3, Section 3.4, subsection .2, (See 3.4.2, page 3.4-3, Volume 1). As described in Section **3.4.1.3, General Land Use Patterns of Permit Area and Adjacent Areas** (page 3.4-2), “the general uses of the surface lands within the Willow Creek Mine permit area include mining, scattered oil and gas production, low-intensity grazing, wildlife habitat, limited timber production at the higher elevations, and dispersed recreational uses including hunting, fishing, hiking and similar activities. With the exception of the Carbon Station, historic and current mining activities, and limited grazing, there are no significant residential, commercial, or agricultural land uses in the permit area and adjacent areas.” It should be noted here that the transfer of land ownership in upper Crandall Canyon to “C” Canyon, LC, and the potential for cabin site development will expand the recreational use capability in that area.

Land uses in the Castle Gate portion of the permit area “are presently and have historically been constrained by location, topography, climate, and availability of important resource values,” (See page 3.4-2, Section **3.4.1.3**). “Rugged terrain, limited soil resources, low precipitation and seasonably harsh weather conditions, limited water resources, and existence of significant high quality coal reserves are the primary factors which determine land use capabilities in this area.” Thus, the potential for expanding the productivity of the lands within the area is limited by factors that are generally uncontrollable. Geologic conditions in the area have impacted the recovery of the coal reserves for decades.

PRWID’s proposal to purchase up to 130 acres of land currently owned by Cyprus Plateau Corporation in the Price Canyon area is for the purpose of expanding their water treatment capability. This land use would provide an important ingredient for future economic expansion of the Carbon County area. Thus, the approval of an industrial classification for the Castle Gate area would provide an enhanced usage of that land, benefiting the entire local population.

The proposal to change the final surface configuration of the School House Canyon refuse facility by changing the reclamation plan for that area will not change the already approved pre-mining/post-mining land use of wildlife habitat, (See page 3.4-18, TASK ID#1788). An examination of *EXHIBITS 3.4-9 and 3.4-10* reveals that although a drainage will be established through the center of the refuse facility, the slopes of the final surface configuration will be established at gradients varying from 2.68H/1V to as high as 9H/1V, (See cross sections A-A', B-B', C-C', *EXHIBIT 3.4-10*). The refuse pile will be re-soiled and re-vegetated, providing grazing on moderate slopes. These slopes are much more gentle than the gradients upon which grazing and wildlife habitat had occurred prior to the construction of waste rock disposal facility.

MAP 9, WILLOW CREEK MINE, *REGIONAL LAND USE MAP*, depicts the uses of the surface acreages involved for the preparation plant area and the School House Canyon waste rock disposal facility. Both areas exist within the green crosshatched area designated as *MG-1 LANDS (MINING AND GRAZING)* depicted within the legend. The approval and addition of an industrial classification to the Castle Gate area will have no effect on the grazing classification relative to ingress/egress for wildlife in the School House Canyon area. Although the amount of grazing acreage for wildlife may be reduced in the wash plant area due to the construction of sludge or water treatment facilities, an adequate amount of acreage will remain in other areas of this Canyon for low intensity grazing, wildlife habitat.

A professional engineer, registered in the State of Utah, has certified MAP 9.

**Findings:**

The minimum regulatory requirements of this section have been met.

**RECOMMENDATION:**

TASK ID#1788 should be approved.